

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

AMBATO MEDIA, LLC,
Plaintiff,

v.

CLARION CO., LTD. *et al.*,
Defendants.

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CIVIL ACTION NO. 2:09-cv-242-TJW

MEMORANDUM OPINION AND ORDER

Plaintiff Ambato Media, LLC (“Ambato”) filed suit against Defendants Garmin International, Inc., DPH Holdings Corp., and Nextar Inc. (collectively “Defendants”) for patent infringement of U.S. Patent No. 5,432,542 (‘542 Patent). There are four terms in the ‘542 Patent that the parties dispute for claim construction purposes. This Memorandum Opinion and Order addresses the issues raised for claim construction.

I. PLAINTIFF’S PATENT

The ‘542 Patent is entitled “Television Receiver Location Identification.” The abstract of the ‘542 Patent reads:

Location specific messages or programming are generally broadcast and selectively filtered by user terminals which have encoded one or more arbitrary locations of interest. The area surrounding a user, a remote location, a route to be travelled or the like may be selected for receipt of local warnings, local commercial messages and the like. Transmitted messages contain information targeted to geographical groups of users, with location designation coding accompanying location-specific messages. A geographic location selection code is entered into a data processor coupled to the user’s receiver to define the user’s selected location(s) of interest. The processor receives the information segment and its designation code and compares the designated location to the selected one. Segments where the designated and selected points or areas overlap are processed, e.g., being displayed, stored or used to trigger a warning. The user’s selection code is variable and plural locations can be used and prioritized. Preferably, regions are encoded by their boundaries, e.g., in longitude, latitude, altitude or the

like, and in absolute or relative coordinates, and shorthand designations can refer to stored definitions of areas. Filtering segments based on message content, prioritizing the messages and additional features can be included. The system is especially useful for distributing local commercial messages, hazard warnings or the like.

Ambato is asserting three claims in this litigation: 36, 38, and 39. These three claims are reproduced here:

36. An apparatus for location specific processing of generally broadcast data, the data including successive information units containing respective location designation codes that are variable among the successive information units, comprising:

means for receiving successive information units, coupled to a memory operable to store a location selection code;

an input means coupled to the memory for loading said location selection code;

means for comparing the location selection code from the input means with the location designation codes of the successive information units as received by said means for receiving, and identifying an overlap;

means for processing selected ones of the information units as a function of said overlap.

38. The apparatus according to claim 36, wherein the input means comprises an automatic location sensor.

39. The apparatus according to claim 38 wherein the automatic location sensor is associated with a mobile unit, and is operable to update said location selection code.

II. GENERAL PRINCIPLES GOVERNING CLAIM CONSTRUCTION

“A claim in a patent provides the metes and bounds of the right which the patent confers on the patentee to exclude others from making, using or selling the protected invention.” *Burke, Inc. v. Bruno Indep. Living Aids, Inc.*, 183 F.3d 1334, 1340 (Fed. Cir. 1999). Claim construction is an issue of law for the court to decide. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 970-71 (Fed. Cir. 1995) (en banc), *aff’d*, 517 U.S. 370 (1996).

To ascertain the meaning of claims, the court looks to three primary sources: the claims, the specification, and the prosecution history. *Markman*, 52 F.3d at 979. The specification must contain a written description of the invention that enables one of ordinary skill in the art to make and use the invention. *Id.* A patent’s claims must be read in view of the specification, of which they are a part. *Id.* For claim construction purposes, the description may act as a sort of dictionary, which explains the invention and may define terms used in the claims. *Id.* “One purpose for examining the specification is to determine if the patentee has limited the scope of the claims.” *Watts v. XL Sys., Inc.*, 232 F.3d 877, 882 (Fed. Cir. 2000).

Nonetheless, it is the function of the claims, not the specification, to set forth the limits of the patentee’s claims. Otherwise, there would be no need for claims. *SRI Int’l v. Matsushita Elec. Corp.*, 775 F.2d 1107, 1121 (Fed. Cir. 1985) (en banc). The patentee is free to be his own lexicographer, but any special definition given to a word must be clearly set forth in the specification. *Intellicall, Inc. v. Phonometrics, Inc.*, 952 F.2d 1384, 1388 (Fed. Cir. 1992). Although the specification may indicate that certain embodiments are preferred, particular embodiments appearing in the specification will not be read into the claims when the claim language is broader than the embodiments. *Electro Med. Sys., S.A. v. Cooper Life Sciences, Inc.*, 34 F.3d 1048, 1054 (Fed. Cir. 1994).

This Court's claim construction decision must be informed by the Federal Circuit's decision in *Phillips v. AWH Corporation*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). In *Phillips*, the court set forth several guideposts that courts should follow when construing claims. In particular, the court reiterated that "the *claims* of a patent define the invention to which the patentee is entitled the right to exclude." 415 F.3d at 1312 (emphasis added) (*quoting Innova/Pure Water, Inc. v. Safari Water Filtration Systems, Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). To that end, the words used in a claim are generally given their ordinary and customary meaning. *Id.* The ordinary and customary meaning of a claim term "is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application." *Id.* at 1313. This principle of patent law flows naturally from the recognition that inventors are usually persons who are skilled in the field of the invention and that patents are addressed to and intended to be read by others skilled in the particular art. *Id.*

The primacy of claim terms notwithstanding, *Phillips* made clear that "the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification." *Id.* Although the claims themselves may provide guidance as to the meaning of particular terms, those terms are part of "a fully integrated written instrument." *Id.* at 1315, *quoting Markman*, 52 F.3d at 978. Thus, the *Phillips* court emphasized the specification as being the primary basis for construing the claims. *Id.* at 1314-17. As the Supreme Court stated long ago, "in case of doubt or ambiguity it is proper in all cases to refer back to the descriptive portions of the specification to aid in solving the doubt or in ascertaining the true intent and meaning of the language employed in the claims." *Bates v. Coe*, 98 U.S. 31, 38 (1878). In

addressing the role of the specification, the *Phillips* Court quoted with approval its earlier observations from *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998):

Ultimately, the interpretation to be given a term can only be determined and confirmed with a full understanding of what the inventors actually invented and intended to envelop with the claim. The construction that stays true to the claim language and most naturally aligns with the patent's description of the invention will be, in the end, the correct construction.

Phillips, 415 F.3d at 1316. Consequently, *Phillips* emphasized the important role the specification plays in the claim construction process.

The prosecution history also continues to play an important role in claim interpretation. Like the specification, the prosecution history helps to demonstrate how the inventor and the PTO understood the patent. *Id.* at 1317. Because the file history, however, “represents an ongoing negotiation between the PTO and the applicant,” it may lack the clarity of the specification and thus be less useful in claim construction proceedings. *Id.* Nevertheless, the prosecution history is intrinsic evidence that is relevant to the determination of how the inventor understood the invention and whether the inventor limited the invention during prosecution by narrowing the scope of the claims. *Id.*

Phillips rejected any claim construction approach that sacrificed the intrinsic record in favor of extrinsic evidence, such as dictionary definitions or expert testimony. The *en banc* court condemned the suggestion made by *Texas Digital Systems, Inc. v. Telegenix, Inc.*, 308 F.3d 1193 (Fed. Cir. 2002), that a court should discern the ordinary meaning of the claim terms (through dictionaries or otherwise) before resorting to the specification for certain limited purposes. *Phillips*, 415 F.3d at 1319-24. The approach suggested by *Texas Digital*—the assignment of a limited role to the specification—was rejected as inconsistent with decisions holding the

specification to be the best guide to the meaning of a disputed term. *Id.* at 1320-21. According to *Phillips*, reliance on dictionary definitions at the expense of the specification had the effect of “focus[ing] the inquiry on the abstract meaning of words rather than on the meaning of claim terms within the context of the patent.” *Id.* at 1321. *Phillips* emphasized that the patent system is based on the proposition that the claims cover only the invented subject matter. *Id.* What is described in the claims flows from the statutory requirement imposed on the patentee to describe and particularly claim what he or she has invented. *Id.* The definitions found in dictionaries, however, often flow from the editors’ objective of assembling all of the possible definitions for a word. *Id.* at 1321-22.

Phillips does not preclude all uses of dictionaries in claim construction proceedings. Instead, the court assigned dictionaries a role subordinate to the intrinsic record. In doing so, the court emphasized that claim construction issues are not resolved by any magic formula. The court did not impose any particular sequence of steps for a court to follow when it considers disputed claim language. *Id.* at 1323-25. Rather, *Phillips* held that a court must attach the appropriate weight to the intrinsic sources offered in support of a proposed claim construction, bearing in mind the general rule that the claims measure the scope of the patent grant.

The patents-in-suit include claim limitations that are argued to fall within the scope of 35 U.S.C. § 112, ¶ 6. “An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure . . . in support thereof, and such claim shall be construed to cover the corresponding structure . . . described in the specification and equivalents thereof.” 35 U.S.C. § 112, ¶ 6. When a claim uses the term “means” to describe a limitation, a presumption inheres that the inventor used the term to invoke § 112, ¶ 6. *Biomedino, LLC v. Waters Technologies Corp.*, 490 F.3d 946, 950 (Fed. Cir. 2007).

“This presumption can be rebutted when the claim, in addition to the functional language, recites structure sufficient to perform the claimed function in its entirety.” *Id.*, citing *Altiris, Inc. v. Symantec Corp.*, 318 F.3d 1363, 1375 (Fed. Cir. 2003). By contrast, when a claim term does not use “means,” the term is presumptively not subject to § 112, ¶ 6. *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1369 (Fed. Cir. 2002); *MIT v. Abacus Software*, 462 F.3d 1344, 1353 (Fed. Cir. 2006). A limitation lacking the term “means” may overcome the presumption if it is shown that “the claim term fails to recite sufficiently definite structure or else recites function without reciting sufficient structure for performing that function.” *MIT*, 462 F.3d at 1353, quoting *CCS Fitness*, 288 F.3d at 1369. “What is important is whether the term is one that is understood to describe structure, as opposed to a term that is simply a nonce word or a verbal construct that is not recognized as the name of structure and is simply a substitute for the term ‘means for.’” *Lighting World, Inc. v. Birchwood Lighting, Inc.*, 382 F.3d 1354, 1360 (Fed. Cir. 2004).

Once the court has concluded the claim limitation is a means-plus-function limitation, the first step in construing a means-plus-function limitation is to identify the recited function. *See Micro Chem., Inc. v. Great Plains Chem. Co.*, 194 F.3d 1250, 1258 (Fed. Cir. 1999). The second step in the analysis is to identify in the specification the structure corresponding to the recited function. *Id.* The “structure disclosed in the specification is ‘corresponding’ structure only if the specification or prosecution history clearly links or associates that structure to the function recited in the claim.” *Medical Instrumentation and Diagnostics Corp. v. Elekta AB*, 344 F.3d 1205, 1210 (Fed. Cir. 2003), citing *B. Braun v. Abbott Labs*, 124 F.3d 1419, 1424 (Fed. Cir. 1997). The patentee must clearly link or associate structure with the claimed function as part of the quid pro quo for allowing the patentee to express the claim in terms of function pursuant to

§ 112, ¶ 6. *See id.* at 1211; *see also Budde v. Harley-Davidson, Inc.*, 250 F.3d 1369, 1377 (Fed. Cir. 2001). The “price that must be paid” for use of means-plus-function claim language is the limitation of the claim to the means specified in the written description and equivalents thereof. *See O.I. Corp. v. Tekmar Co.*, 115 F.3d 1576, 1583 (Fed. Cir. 1997). “If the specification does not contain an adequate disclosure of the structure that corresponds to the claimed function, the patentee will have ‘failed to particularly point out and distinctly claim the invention as required by the second paragraph of section 112,’ which renders the claim invalid for indefiniteness.” *Blackboard, Inc. v. Desire2Learn, Inc.*, 574 F.3d 1371, 1382 (Fed. Cir. 2009), *quoting In re Donaldson Co.*, 16 F.3d 1189, 1195 (Fed. Cir. 1994) (en banc). It is important to determine whether one of skill in the art would understand the specification itself to disclose the structure, not simply whether that person would be capable of implementing the structure. *See Atmel Corp. v. Info. Storage Devices, Inc.*, 198 F.3d 1374, 1382 (Fed. Cir. 1999); *Biomedino*, 490 F.3d at 953. Fundamentally, it is improper to look to the knowledge of one skilled in the art separate and apart from the disclosure of the patent. *See Medical Instrumentation*, 344 F.3d at 1211-12. “[A] challenge to a claim containing a means-plus-function limitation as lacking structural support requires a finding, by clear and convincing evidence, that the specification lacks disclosure of structure sufficient to be understood by one skilled in the art as being adequate to perform the recited function.” *Budde*, 250 F.3d at 1376-77.

At issue in this case is whether certain claims of the patents-in-suit are indefinite. A claim is invalid for indefiniteness if it fails to particularly point out and distinctly claim the subject matter that the applicant regards as the invention. 35 U.S.C. § 112, ¶ 2. To prevail on an indefiniteness argument, the party seeking to invalidate a claim must prove “by clear and convincing evidence that a skilled artisan could not discern the boundaries of the claim based on

the claim language, the specification, and the prosecution history, as well as her knowledge of the relevant art area.” *Halliburton Energy Services, Inc. v. M-I LLC*, 514 F.3d 1244, 1249-50 (Fed. Cir. 2008). The primary purpose of the definiteness requirement is to ensure public notice of the scope of the patentee’s legal right to exclude, such that interested members of the public can determine whether or not they infringe. *Datamize, LLC v. Plumtree Software, Inc.*, 417 F.3d 1342, 1347 (Fed. Cir. 2005); *Halliburton*, 514 F.3d at 1249; *Honeywell Int’l Inc. v. Int’l Trade Comm’n*, 341 F.3d 1332, 1338 (Fed. Cir. 2003). Courts apply the general principles of claim construction in their efforts to construe allegedly indefinite claim terms. *Datamize*, 417 F.3d at 1348; *Young v. Lumenis, Inc.*, 492 F.3d 1336, 1346 (Fed. Cir. 2007). A claim is indefinite only when a person of ordinary skill in the art is unable to understand the bounds of the claim when read in light of the specification. *Miles Labs., Inc. v. Shandon, Inc.*, 997 F.2d 870, 875 (Fed. Cir. 1993); *Star Scientific, Inc. v. R.J. Reynolds Tobacco Co.*, 537 F.3d 1357, 1371 (Fed. Cir. 2008). A determination of claim indefiniteness is a conclusion of law. *Exxon Research & Eng’g Co. v. United States*, 265 F.3d 1371, 1375-76 (Fed. Cir. 2001); *Datamize*, 417 F.3d at 1347.

A claim is indefinite only if the claim is “insolubly ambiguous” or “not amenable to construction.” *Exxon*, 265 F.3d at 1375; *Young*, 492 F.3d at 1346; *Halliburton*, 514 F.3d at 1249; *Honeywell*, 341 F.3d at 1338-39. A court may find a claim indefinite “only if reasonable efforts at claim construction prove futile.” *Datamize*, 417 F.3d at 1347. A claim term is not indefinite solely because the term presents a difficult claim construction issue. *Id.*; *Exxon*, 265 F.3d at 1375; *Honeywell*, 341 F.3d at 1338. “If the meaning of the claim is discernable, even though the task may be formidable and the conclusion may be one over which reasonable persons will disagree, . . . the claim [is] sufficiently clear to avoid invalidity on indefiniteness grounds.” *Exxon*, 265 F.3d at 1375; *Halliburton*, 514 F.3d at 1249.

III. AGREED CONSTRUCTIONS

| Claim Terms in '542 Patent | Agreed Construction |
|---|--|
| location specific processing | displaying, storing or using information based upon the location of interest |
| successive information units | information segments in a sequence |
| overlap | intersection of the geographic location or area indicated by the location selection code and the geographic location or area indicated by the location selection code |
| variable | arbitrary |
| coupled to a memory | associated to a memory |
| location designation codes | codes designating geographic locations or areas |
| as received | when received |
| input means coupled to the memory for loading said location selection code | Means-plus-function term subject to 35 U.S.C. § 112, ¶ 6 <u>Function:</u> loading the location selection code <u>Structure:</u> a user input device or an automatic location-determination device, or its equivalent |
| location selection code | variable code indicated a selected geographic location or area |
| comparing the location selection code . . . with the location designation codes | comparing the geographic location or area designated by the location selection code with the geographic locations or areas designated by the location designation codes |
| automatic location sensor | a device sensing location automatically |

IV. DISCUSSION: TERMS IN DISPUTE FROM THE '542 PATENT

a. “generally broadcast data”

| Claim Language | Ambato’s Proposed Construction | Defendants’ Proposed Construction |
|--|--|---|
| 36. An apparatus for location specific processing of generally broadcast data , the data including successive information units containing respective location designation codes that are variable among the successive information units, comprising | Plain and ordinary meaning; however, to the extent that this term must be construed, it is synonymous with “data broadcasted generally.” | “data that is transmitted to all receivers within reception range of the broadcast” |

1. The Parties’ Construction Arguments

Plaintiff argues that there is no special meaning used for “generally broadcast data” in the patent. Plaintiff states that the specification uses the word “broadcast” in a general and non-limiting manner. *See, e.g.*, ‘542 Patent, 5:32-37 (“Transmission of information to a set-top unit can be any *broadcast* method. Presently available methods include, for example, cable, radio broadcast, fiber-optic or other information transmission channels, digital and analog signals, or hybrids of both, private carriers and common carriers, and other *broadcast* methods.”); *Id.* at 2:11-12 (“The information is *broadcast* to all receivers, but only the subscribers can use it.”); *Id.* at 5:10-19 (“Inasmuch as geographic information is the basis of selection, *broadcasts* which are usefully interpreted by geographic location of the receiver need only be *broadcast* with their geographic information attached, rather than having to *broadcast* separately by unique ID or entitlement code to individual receivers known to be located in a given area, or to have to *broadcast* the same information on a plurality of frequencies simultaneously, or to have to *broadcast* uniformly to all receivers in a general *broadcast*.”) (emphasis added in all). In the alternative, if construction is necessary, Plaintiff argues “generally broadcast data” should mean

“data broadcasted generally.” Defendants state that Plaintiff’s construction is not helpful and is circular.

Defendants seek a more specific construction that reads “data that is transmitted to all receivers within the reception range of the broadcast.” Defendants claim that the “heart of the ‘542 patent’s alleged invention is that information is transmitted to *all* receivers within range (i.e., ‘generally broadcast data’), but only processed by users that have previously indicated an interest in the location to which the information pertains.” (Dkt. No. 210, at 13-14 (citing to the ‘542 Patent at 1:7-12, 4:57-61, 1:62-67 & 6:35-36).) Defendants argue that the specification supports Defendants’ construction that requires the broadcasting of information to all receivers “within reception range.” *See* ‘542 Patent, 4:57-61. Defendants argue that the use of “transmitted” in Defendants’ proposed construction is proper because the word “transmitted” is used interchangeably with “broadcast.” To illustrate, Defendants point to the specification where it states that “[t]he invention provides a programmable receiver system to use location information embedded in a *general broadcast or transmitted* in connection with a general broadcast.” *Id.* at 6:37-40 (emphasis added). Finally, Defendants state that the prosecution history supports its construction. (*See* Sept. 21, 1994 Amendment, at 7, attached to Kassenoff Decl., Ex. B (“The claims have been amended to make clear that both location selection codes (associated with the transmitted messages) and the location selection codes (determined at the receiver are involved . . .”).) Plaintiff argues that Defendants’ proposed construction improperly adds the limitation “within reception range” and that the word “transmitted” is not use interchangeably with “broadcast.”

2. Analysis

The Court agrees with Plaintiff and adopts the construction of “generally broadcast data” as “data broadcasted generally.” Defendants’ proposed construction is improper. There is essentially no support in the specification for the additional limitation that Defendants add, that is, that the transmission is to receivers “within the reception range.” Defendants cite to the specification for support of the “within the reception range” limitation, but the portion of the specification they cite does not provide clear support. *See* ‘542 Patent, 4:57-61 (“It is an object of the invention to transmit considerable information with a minimum usage of broadcast bandwidth because additional bandwidth is not required to separate messages geographically or to address specific users, for example by unique or semi-unique encoding (e.g., political jurisdiction or subdivision, address, telephone number”). Further, the specification does not use the words “transmitted” and “broadcast” interchangeably. *See id.* at 6:37-40 (“The invention provides a programmable receiver system to use location information *embedded in a general broadcast or transmitted in connection with a general broadcast.*”) (emphasis added). As the quote in the previous citation indicates, “transmitted” cannot mean “broadcast,” according to the patent, because information can be “transmitted” in connection with a “broadcast.”

Although Defendants may be correct that Plaintiff’s construction is not as helpful, the construction is at least accurate, which is more than can be said of Defendants’ proposed construction. Therefore, “generally broadcast data” is construed as “data broadcasted generally.”

b. “means for receiving successive information units”

| Claim Language | Ambato’s Proposed Construction | Defendants’ Proposed Construction |
|--|--|---|
| <p>36. An apparatus for location specific processing of generally broadcast data, the data including successive information units containing respective location designation codes that are variable among the successive information units, comprising:</p> <p>means for receiving successive information units, coupled to a memory operable to store a location selection code;</p> <p>an input means coupled to the memory for loading said location selection code;</p> <p>means for comparing the location selection code from the input means with the location designation codes of the successive information units as received by said means for receiving, and identifying an overlap;</p> <p>means for processing selected ones of the information units as a function of said overlap.</p> | <p><u>Function:</u> receiving successive information units</p> <p><u>Structure:</u> a receiver or tuner, or its equivalent</p> | <p><u>Function:</u> receiving successive information units</p> <p><u>Structure:</u> a television receiver; VCR; cable interface box; GPS unit coupled to a set-top unit</p> |

The parties agree that this is a means-plus-function term subject to 35 U.S.C. § 112, ¶ 6, and the parties agree the function is “receiving successive information units.” The parties disagree regarding the structure. Defendants propose a structure of “a television receiver; VCR; cable interface box; GPS unit coupled to a set-top unit” and Ambato proposes a structure of “a receiver or tuner, or its equivalent.” The Court adopts the parties agreed construction for the function and construes the structure to be “a receiver or tuner-equipped device.”

1. The Parties’ Construction Arguments

Both parties cite to similar portions of the specification for their arguments, but the parties disagree regarding the meaning of those portions of the specification. For example, both parties primarily rely on one sentence in the specification: “In this context, a ‘receiver’ is

construed to include a variety of tuner-equipped devices such as television receivers, VCRs, cable interface boxes and the like, whereby a signal is selected.” ‘542 Patent, 3:46-51. Ambato argues this quote supports a structure of “receiver” or “tuner.” In response, Defendants claim Ambato’s structure incorrect and Ambato is merely function claiming.

Defendants, though implicitly recognizing that a “receiver” performs the function of “receiving successive information units,” want to limit the structure to a subset of the term “receiver,” that is, to “a television receiver,” “VCR,” or “cable interface device.” In addition, Defendants add the structure of a “GPS unit coupled to a set-top unit,” and cite to the specification for support. *See* ‘542 Patent, 14:54-66 (“By use of dynamic global positioning system (GPS) input information, roadside location transmitters, or preprogrammed route information, location data can be received or entered for updating a present location of the receiver. Drivers thus can be selectively targeted for specific messages relating to local conditions and conditions along their impending routes. . . . For vehicles, a portable geographic reporting unit, such as a Global Positioning System (GPS) unit can be supplemented with an altitude sensing unit to encode elevation data. This position sensing means is coupled to the set-top unit to provide the necessary location information.”). Ambato argues that Defendants’ structure is too limiting.

2. Analysis

The Court adopts a construction for the structure that is close to Ambato’s proposed construction: “a receiver or tuner-equipped device.” The only major changes from Ambato’s proposed construction are removing the “or its equivalent” language because it is not necessary since, as a matter of law, the structure will include structural equivalents. And in addition, instead of stating “tuner,” it is replaced it with “tuner-equipped device,” because that is the exact

language used in the specification. *See* ‘542 Patent, 3:47-48 (“a ‘receiver’ is construed to include a variety of *tuner-equipped devices* . . .”) (emphasis added).

The Court’s construction is correct because a “receiver,” or a “tuner-equipped device,” is clearly linked to the function of “receiving successive information units.” *See id.* at 3:46-51 (“In this context, a ‘receiver’ is construed to include a variety of tuner-equipped devices such as television receivers, VCRs, cable interface boxes and the like, whereby a signal is selected.”). Even Defendants implicitly agree that a “receiver” performs the function of “receiving successive information units.” To illustrate, Defendants’ proposed structure includes “television receiver,” “VCR,” and “cable interface box,” and the patent defines these devices as receivers. *See id.* In addition, other claims in the Patent show that the “receiver” performs the function of “receiving successive information units.” *See id.* at Claim 14, 17:30 (“receiving the information segments at a receiver”). Although Defendants argue a structure of “receiver” would be function claiming, Defendants are incorrect because a “receiver” is a known device in the art, as opposed to a term created by the patentee to perform the function of receiving. Furthermore, “tuner-equipped device” is clearly linked to the function because the patent clearly states that “a ‘receiver’ is construed to include a variety of tuner-equipped devices . . .” *Id.* at 3:46-51.

Defendants’ construction of the structure, however, is incorrect because it is too limiting. Defendants seek to limit the structure to certain types of receivers (i.e., a subset of receivers), but as discussed above, it is the receiver that is clearly linked to the function. Furthermore, Defendants (who manufacture GPS units) are apparently trying to define the structure as any unit that is not portable because in their proposed construction, the GPS unit must be “coupled to a set-top unit.” The patent, on the other hand, is clear that “[w]hile the foregoing methods assume a stationary receiver, the invention is fully applicable to *portable receivers* such as those in

vehicles.” *Id.* at 14:42-44 (emphasis added). Therefore, for the foregoing reasons, the Court construes the structure to be “a receiver or tuner-equipped device.”

- c. **“means for comparing the location selection code from the input means with the location designation codes of the successive information units as received by said means for receiving, and identifying an overlap”**

| Claim Language | Ambato’s Proposed Construction | Defendants’ Proposed Construction |
|--|---|---|
| <p>36. An apparatus for location specific processing of generally broadcast data, the data including successive information units containing respective location designation codes that are variable among the successive information units, comprising:</p> <p>means for receiving successive information units, coupled to a memory operable to store a location selection code;</p> <p>an input means coupled to the memory for loading said location selection code;</p> <p>means for comparing the location selection code from the input means with the location designation codes of the successive information units as received by said means for receiving, and identifying an overlap;</p> <p>means for processing selected ones of the information units as a function of said overlap.</p> | <p><u>Function</u>: comparing the location selection code from the input means with the location designation codes of the successive information units as received by said means for receiving, and identifying overlap</p> <p><u>Structure</u>: hardware or software used for comparing, or its equivalent</p> <p><u>Algorithm</u> (if applicable): any geometric intersection algorithm or any matching algorithm</p> | <p><u>Function</u>: comparing the location selection code from the input means with the location designation codes of the successive information units as received by said means for receiving, and identifying overlap</p> <p><u>Structure</u>: indefinite; the patent fails to provide any details, such as an algorithm, of the (data) processor or comparator</p> |

As with the last term, the parties agree that this is a means-plus-function term governed by 35 U.S.C. § 112, ¶ 6 and that the function should be “comparing the location selection code from the input means with the location designation codes of the successive information units as received by said means for receiving, and identifying overlap.” The parties dispute the structure. Ambato proposes a structure of “hardware or software used for comparing, or its equivalents,” and Defendants argue that the structure is indefinite. The Court adopts the parties’ agreed function and, for the following reasons, construes the structure to be “a data processor programmed to perform a geometric intersection algorithm.”

1. The Parties' Construction Arguments

Ambato cites to the specification for support that the structure for the above-mentioned function should essentially be hardware or software used for comparing. *See, e.g.*, '542 Patent, 3:52-55, 6:24-27, 7:55-58, 8:10-11 & 10:4-8. Defendants, on the other hand, argue the structure is indefinite. Defendants claim the case *WMS Gaming Inc. v. Int'l Game Tech.*, 184 F.3d 1339 (Fed. Cir. 1999) applies here. In *WMS Gaming*, the court stated that "[i]n a means-plus-function claim in which the disclosed structure is a computer, or microprocessor, programmed to carry out an algorithm, the disclosed structure is not the general purpose computer, but rather the special purpose computer programmed to perform the disclosed algorithm." *Id.* at 1349. Defendants state that because the patent does not sufficiently disclose an algorithm for the structure, the asserted claims are indefinite. Ambato argues that *WMS Gaming* is not applicable because there was no general-purpose computer disclosed in this patent, unlike *WMS Gaming*. (Dkt. No. 207, at 28.) In any event, Ambato claims if an algorithm is required, then the patent sufficiently discloses "any geometric intersection algorithm or any matching algorithm."

2. Analysis

The Court agrees with Defendants that the rule from *WMS Gaming* applies in this case, but the Court disagrees that the claim is indefinite. Ambato argues that *WMS Gaming* does not apply because the patent discloses a special-purpose processor (i.e., the comparator) and not a general purpose computer (Dkt. No. 212, at 6), but the Court disagrees. The Federal Circuit has held that to avoid purely functional claiming in computer-implemented inventions, "the structure disclosed in the specification [is required to be] more than simply a general purpose computer or microprocessor." *Aristocrat Techs. Austl. Pty Ltd. v. Int'l Game Tech.*, 521 F.3d 1328, 1333 (Fed. Cir. 2008). Therefore, "in a means-plus-function claim 'in which the disclosed structure is

a computer, or microprocessor, programmed to carry out an algorithm, the disclosed structure is not the general purpose computer, but rather the special purpose computer programmed to perform the disclosed algorithm.” *Id.* (quoting *WMS Gaming*, 184 F.3d at 1349). The ‘542 Patent specification only mentions a comparator one time. ‘542 Patent, 3:52-56 (“According to a preferred embodiment, a set-top receiver such as a cable interface device or the like includes a processor, or at least a comparator, which is encoded at least with its geographic location . . .”). Further, there has not been sufficient evidence presented to this Court, at this time, for the Court to hold that the comparator is a known special-purpose computer to one of ordinary skill in the art. Based on the disclosure in the specification, the Court can only hold that a comparator is a type of processor. As such, for the “means for comparing” limitation at issue here, the specification discloses a “data processor” for performing the function. *See, e.g.*, ‘542 Patent, 6:20, 8:4, 10:7 & 11:7. Because a data processor is a general-purpose computer, the rule from *WMS Gaming* applies, so the structure is the algorithm executed by the general-purpose computer.

Although *WMS Gaming* applies, the ‘542 Patent sufficiently discloses an algorithm to be performed by the data processor, so the claims are not invalid for indefiniteness. Federal Circuit case law since *WMS Gaming* has further defined the requirements for a sufficient disclosure of an algorithm. The Federal circuit has stated:

The correct inquiry is to look at the *disclosure* of the patent and determine if one of skill in the art would have understood that *disclosure* to encompass software for digital-to-digital conversion and been able to implement such a program, not simply whether one of skill in the art would have been able to write such a software program. . . . It is important to determine whether one of skill in the art would understand the specification itself to disclose structure, not simply whether that person would be capable of implementing that structure. . . . It is not proper to look to the knowledge of one skilled in the art apart from and unconnected to the disclosure of the patent.

Medical Instrumentation & Diagnostics Corp. v. Elekta AB, 344 F.3d 1205, 1212 (Fed. Cir. 2003) (emphasis in original). *See also Aristocrat*, 521 F.3d at 1337-38. The ‘542 Patent explicitly and clearly discloses that “[s]tandard geometric intersection algorithms can be used to test for containment or intersection.” ‘542 Patent, 13:8-10. Therefore, the claim is not indefinite because one of ordinary skill in the art would understand that a geometric intersection algorithm has been disclosed in the specification.

Nevertheless, Defendants argue that the disclosure of “geometric intersection algorithm” is not sufficient because it is merely a description of a *type of algorithm* one could utilize and provides no detail, and Defendants argue such a generalized description is insufficient as a matter of law. (Dkt. No. 210, at 27). The Court disagrees for three reasons.

First, the Federal Circuit has stated that a “[c]laim of definiteness . . . depends on the skill level of a person of ordinary skill in the art . . . and in software cases, therefore, algorithms in the specification need only disclose adequate defining structure to render the bounds of the claim understandable to one of ordinary skill in the art.” *AllVoice Computing PLC v. Nuance Commcs., Inc.*, 504 F.3d 1236, 1245 (Fed. Cir. 2007). Defendants have provided no argument or evidence that one of ordinary skill in the art would not understand the meaning and bounds of the term “geometric intersection algorithm.” Because Defendants have the burden of proving indefiniteness by clear and convincing evidence, the Defendants have not met their burden and their indefiniteness assertion fails. Even so, the specification states that “[s]tandard geometric intersection algorithms can be used.” ‘542 Patent, 13:8-10 (emphasis added). By using the word “standard,” it implies that at least the inventors believed that geometric intersection algorithms are known in the art and thus one of ordinary skill in the art would understand the disclosure.

Second, Defendants have provided no supporting case law for their argument that this “generalized description” is insufficient as a matter of law. (Dkt. No. 210, at 27.) The only case Defendants cite for this argument is *Sybase, Inc. v. Vertica Sys., Inc.*, No. 6:08-cv-00024 (LED) (E.D. Tex. May 13, 2010) (Davis, J.) (attached as Ex. E to Dkt. No. 210). But in *Sybase*, the Court found indefiniteness when the “specification merely provide[d] a non-specific reference to a software tool and fail[ed] to disclose the algorithm being executed to break down the data.” *Id.* at 28. The facts in the present case, however, are drastically different than *Sybase*. In the present case, the inventor explicitly disclosed a type of algorithm—a geometric intersection algorithm. Therefore, Defendants have provided no support for their argument.

Third, even if more detail is required regarding the geometric intersection algorithm, Defendants are incorrect that the ‘542 Patent provides no detail. Rather, the specification explains that “[b]y a suitable comparison of the polygonal edges of the defined regions using a series of less-than, greater-than comparisons, the data processor can determine an intersection or lack thereof.” ‘542 Patent, 10:5-9. In addition, the specification is replete with other details regarding the geometric intersection algorithm. *See, e.g.*, ‘542 Patent, FIG. 3, FIG. 5, FIG. 6, 4:7-9, 6:18-27, 6:61-64, 8:3-9, 10:41-47, 12:65-13:10 & 14:1-15. Further, contrary to Defendants’ assertion, the patentee is not required to disclose the mathematical algorithm, source code, flow chart, or step-by-step process of the algorithm. Instead, the Federal Circuit “permits a patentee to express [the] algorithm in any understandable terms including as a mathematical formula, in prose, . . . or as a flow chart, or in any other manner that provides sufficient structure.” *Finisar Corp. v. DirecTV Group, Inc.*, 523 F.3d 1323, at 1340 (Fed. Cir. 2008).

As for Ambato’s other arguments which have not been addressed, the Court rejects Ambato’s proposed structure of “hardware or software used for comparing, or its equivalent”

because it does not include an algorithm. The Court rejects the use of a “comparator” in the structure for the reasons stated above. And further, the Court rejects Ambato’s proposed algorithm of “any geometric intersection algorithm or any matching algorithm” because a “matching algorithm” is not clearly linked in the specification to the function. The specification does not discuss a “matching algorithm,” but instead uses the word “matching” in conjunction with “intersection.” ‘542 Patent, 10:42-48 (“For example, a service provider may define a service zone, which the data processor matches with the user’s selected location (e.g., that of the set-top unit) to determine intersection . . .”). With that said, the means-plus-function structure includes structural equivalents, and the “comparator” or “matching algorithm” could be a structural equivalent, though the Court is not deciding that issue at this time. It is this Court’s view, though, that even though structural equivalents are included, it is unnecessary to include the language “or its equivalents” to the end of the construction of the structure, as Ambato has requested. In accordance, the Court concludes that the claim is not indefinite and construes the structure to be “a data processor programmed to perform a geometric intersection algorithm.”

d. “means for processing selected ones of the information units as a function of said overlap”

| Claim Language | Ambato’s Proposed Construction | Defendants’ Proposed Construction |
|--|---|---|
| <p>36. An apparatus for location specific processing of generally broadcast data, the data including successive information units containing respective location designation codes that are variable among the successive information units, comprising:</p> <p>means for receiving successive information units, coupled to a memory operable to store a location selection code;</p> <p>an input means coupled to the memory for loading said location selection code;</p> <p>means for comparing the location selection code from the input means with the location designation codes of the successive information units as received by said means for receiving, and identifying an overlap;</p> <p>means for processing selected ones of the information units as a function of said overlap.</p> | <p><u>Function</u>: processing the selected ones of the information units as a function of said overlap</p> <p><u>Structure</u>: a processor executing an algorithm that handles message as a function of overlap</p> <p><u>Algorithm</u>: if there is an overlap, process the message one way; if there is no overlap, process the message a different way</p> | <p><u>Function</u>: processing the selected ones of the information units as a function of said overlap</p> <p><u>Structure</u>: a processor executing an algorithm that handles message as a function of overlap</p> <p><u>Algorithm</u>: If there is an overlap, process the message. If there is no overlap, do not process the message.</p> |

The parties again agree that this is a means-plus-function term governed by 35 U.S.C. § 112, ¶ 6 and that the function should be “processing the selected ones of the information units as a function of said overlap.” The parties also agree that the structure is “a processor executing an algorithm that handles message as a function of overlap.” The only dispute is the algorithm. Ambato argues the algorithm should be: “if there is an overlap, process the message one way; if there is no overlap, process the message a different way.” Alternatively, Defendants argue the algorithm should be: “If there is an overlap, process the message. If there is no overlap, do not process the message.” The Court disagrees with both parties’ proposed constructions, and

construes the algorithm to be: “If there is an overlap, process the message. If there is no overlap, either process the message differently or do not process the message.”

The main dispute is whether all messages are processed in a certain way (i.e., Ambato’s construction) or whether certain messages are processed and others not processed (i.e., Defendants’ construction). Essentially, Defendants are asking the Court to include the limitation that the messages are either processed or not processed, as opposed to Ambato’s construction, which would allow for the messages to be processed one way or perhaps processed in a different way.

Defendants provide some support for their limitation. For example, Figures 5 and 6 potentially indicate that the messages are either processed or not. The abstract also states: “Segments where the designated and selected points or areas overlap are processed.” The specification states that “[s]imilar information which applies to locations in which the user is not interested can be ignored by the processor.” ‘542 Patent, 4:3-5. Additionally, in the prosecution history, the patentee stated: “[t]he prior art references fail to disclose or suggest an arrangement wherein there are two variable locations definitions, one associated with the messages and another associated with the user’s receiver, *such that a processor can determine overlap as a means to select messages of interest for processing.*” (Sept. 21, 1994 Amendment, at 7, attached to Kassenoff Decl, Ex. B to Dkt. No. 210 (emphasis added).)

The Defendants’ limiting construction is improper, however, because it reads out one embodiment. The specification states:

Selection of information to the specifications of the user can be an interactive process, using repetitively transmitted commercial messages which the data processor monitors upon command for selected location and descriptive information. Alternatively, the processor can include a memory whereby location information triggers storage of information in a database which is updated when new information is received. This database can be searched off line, at the user’s

convenience. In that case, the location designated information of interest is not necessarily displayed, but is *processed differently than information which is not of interest, and normally ignored entirely*.

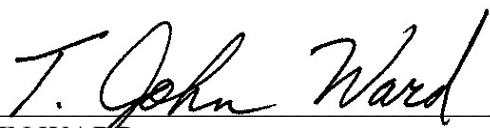
‘542 Patent, at 11:14-26 (emphasis added). As this quote indicates, there may be some occasions where the message is processed differently rather than not processed at all.

Ambato’s proposed construction, however, is also improper because it does not clearly account for the fact that sometimes the message is not processed at all. The support provided by Defendants above shows that in some instances the message or information may be “ignored by the processor.” *Id.* at 4:3-5. Ambato’s construction, on the other hand, says that the message may be processed in a “different way,” which could potentially mean the message must be processed in some way, rather than not processed at all. Therefore, to account for both situations where the information or message could be processed either (1) differently or (2) not at all, the Court construes the structure as follows: “If there is an overlap, process the message. If there is no overlap, either process the message differently or do not process the message.”

V. CONCLUSION

The Court adopts the constructions set forth in this opinion for the disputed terms of the ‘542 Patent. The parties are ordered that they may not refer, directly or indirectly, to each other’s claim construction positions in the presence of the jury. Likewise, the parties are ordered to refrain from mentioning any portion of this opinion, other than the actual definitions adopted by the Court, in the presence of the jury. Any reference to claim construction proceedings is limited to informing the jury of the definitions adopted by the Court.

SIGNED this 18th day of July, 2011.



T. JOHN WARD
UNITED STATES DISTRICT JUDGE